Observations

ON THE

ENGLISH UNIVERSITIES, WITH REFERENCE TO AFFILIATION OF MEDICAL SCHOOLS.

BY

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We will not occupy time by discussing the original meaning of the word university, nor the intention of the early founders of universities; but simply examine whether these institutions, as they now exist in England, render the full amount of good to medical education of which they are capable.

Prior to 1836, England contained but two Universities. Oxford and Cambridge were the only sources of high class academical honours, and as such attracted the majority of those seeking these advantages; but, since the commencement of this century, owing to various causes, a large number of young men, anxious for superior education, have been unable to obtain it by residence at either of these Universities.

Hence arose throughout the country numerous institutions, unconnected with Oxford or Cambridge, not themselves possessed of academical privileges. The Universities refused to recognise these new seats of learning, and their students were thus excluded from the advantages of University *prestige* and degrees. To supply this want, the University of London was created in 1836, by Royal Charter.

This institution is separate and distinct from all the colleges and schools which it has admitted to the enjoyment of its privileges; and receives for examination candidates educated in any portion of Her Majesty's dominions at home or abroad. "It thus ignores the advantages of academical training and habits, and recognises mere knowledge, wherever that has been acquired, irrespective of any disadvantages which may accompany the mode of acquiring it. It is, in fact, a great literary incorporation, legalised for the purpose of testing the qualifications of young men who present themselves as candidates for literary and scientific honours, and of conferring these honours on the candidates who are found to possess the necessary requirements. It is, moreover, placed under the control of the executive government; and some of its most important regulations require the sanction of a Secretary of State." (*Encyclopædia Britannica.*) And as, in this respect, it especially possesses the character of a national University, so are we entitled to expect from it such arrangements as will sustain and promote the superior education, as well *medical* as general, of the whole country.

The most important feature of this institution, which renders it so distinct from the older Universities, and so invaluable as a great national centre of education, is, that it has no colleges of its own, but is empowered to connect with itself, or to *affiliate*, such educational institutions as shall satisfy the senate that they have furnished to students such a course of instruction, as to justify their being taken on examination for degrees. Wisely carried out, this principle of affiliation is capable of rendering incalculable service to education. Let us see how far this result has been attained.

In a general way, the functions of a national University may be designated as two-fold.

1. Providing for, or securing to, the student good instruction.

2. Testing his knowledge by examination, and stamping the successful aspirant with a degree.

Of these two functions, the former has much the higher relative value; yet, as we have just seen, the tendency of the London University has been to give undue importance and too exclusive attention to the latter.

This University has more or less openly avowed the principle of trusting to the final examinations as a sufficient test, and has been comparatively indifferent to the nature and quality of the education by which the knowledge has been attained.

This University affiliates and receives candidates from nearly every medical school in the kingdom, and yet, in some of these institutions, the standard of education is not equal to that which should be required by any University claiming to be national.

An injustice to the youth of the country is thus indirectly committed; for we know that the permanence and usefulness of all knowledge depends much on the mode by which it is attained. And, in medicine, which, on the one hand, is a profound and complex science, and, on the other, a most delicate and difficult art, the kind of knowledge ultimately possessed by its student depends, as in all arts, essentially on the mode of instruction. The number and character of the facts stored in the brain are of far less import, than the special habits of mind acquired, and the special practical training in the art. The two great qualities of mind, the receptive and the inventive, are both necessary to the practical physician. The efficient development of the inventive powers can only be secured by special modes of training. It is these which give quick observation, ready thought, and fertility of resource. Now, the tendency of an University which trusts mainly to the final examination is, to encourage unduly the mere acquisition of knowledge to the neglect of the equally important power of applying it.

A moment's reflection renders obvious the evils of this system of a too indiscriminate affiliation. It is a constant source of deception to the public. Parents are led to conclude that a school affiliated to the London University is one of approved excellence; and students are, doubtless, constantly consigned to institutions, and their years of study practically wasted, on the faith of this circumstance. Who can tell how many fine minds capable of the highest aims and aspirations in medicine, have been thus doomed to life-long imperfections and hopeless mediocrity; and even those who triumph over the short-comings of their education, and distinguish themselves by taking high academical honours, are still mentally lame and heavily weighted in the struggle of life, compared with what they might have been had their college education been more thorough and complete.

But this lax system of affiliation is not alone an injury to the student, it exerts a deteriorating influence on the schools themselves.

As it deprives the public of a competent test which would enable them to decide on true grounds as to their respective merits, the schools naturally appeal to the number of their pupils, and the proportion of them who graduate and obtain honours at the University, as claims for public confidence. Now, the test of numbers tends to generate a competition

downwards, and is sometimes favoured by measures hostile to sound education, such as undue laxity with students and undue lowering of the school expenses.

Further, a large proportion of distinguished graduates is obviously no reliable evidence of the efficiency of a school. Their number may be fostered by a system which gives disproportionate attention to the more able students, to the neglect of the less talented majority. Now, in all educational arrangements, it is the average intellects which should be especially kept in view, as they constitute the larger number, and, from the fact of their more limited capacity, as compared with cleverer men, suffer more from imperfect systems.

The remedy we suggest for meeting this evil is, an affiliation or recognition, founded upon adequate evidence of the efficiency of the school. In short, we would ask the Universities to examine the schools, and to require a certain standard of efficiency before recognition: also, to stamp those institutions which have complied with those conditions in such a manner as will enable the public readily to distinguish them from others not so qualified. Further, the Universities should provide some means by which they could be assured that the standard once reached is maintained.

The question naturally arises here, What are the conditions which an University should require before affiliating a medical school? A complete answer to this inquiry is no part of our present purpose. We will mention simply two or three points which will serve to indicate the principle of affiliation which we are now advocating.

We would have no school recognised that was not provided with a suitable building, and having especially ample accommodation in dissecting-room and laboratory, for the practical teaching of anatomy and chemistry. We should require an ample library and museum, such as would furnish adequate illustration of the lectures. We should require such endowments as would meet the current expenses of the institution, the payment of tutors' salaries, and would also secure moderate endowments for the chairs of anatomy and chemistry. A very little inquiry, for example, would show that the efficient teaching of chemistry in a provincial medical school, on the present terms, leaves a very small balance of profit to the professor, and a miserably insufficient return for either the quantity or the quality of his labour. We should be inclined to require also of the teacher adequate proof of his proficiency in the subject on which he professes to teach, as well as of his power of imparting his knowledge to others.*

We could add much more on this head; but we have said enough to indicate the kind of requirements which we conceive would tend to raise the standard of medical education; and we should be glad to see the Universities of London, Oxford, and Cambridge, each with its own terms of affiliation. Far from desiring that these should be uniform, we can see much advantage in their having different and independent standards. One would probably be more stringent and exacting than the others; and the schools which such recognised would justly take the higher place in the estimation of the public.

We do not anticipate, under this plan, that a large number of the students in the school so recognised would go on to take their degree at the University. Some would do so, and it is right that this should be in their power; but the important ends contemplated are, the raising of the standard of medical schools, and the public stamping and recognition of those which have complied with the conditions of affiliation.

To some, our plan may appear to favour monopoly in teaching; but, on the contrary, it is quite compatible with the utmost freedom in education—the only restriction that we would impose being, that no school and no teacher should have public recognition, except on sufficient evidence of their competency to discharge the very responsible function which they propose to undertake. And, on the other hand, all schools and teachers who give adequate proof of having reached the requisite standard, should, as a matter of right, be accepted by the Universities, and certain unjust anomalies that now exist in the way of recognition be done away with.

The absence of a restriction such as we suggest affords simply great facilities for the ignorant and meretricious, and its presence would be a righteous protection to the able and conscientious teacher. No more fertile field of imposture exists than education—none where the public are so helpless in sifting the wheat from the chaff. Our own experience tells us that, in selecting a school, students and their friends are not always influenced by a consideration of its merits as a place of instruction, but are often guided by quite other and accidental reasons. This is the case even when they have the opportunity of comparing it with another or other schools in the same town; and when the comparison has to be made between those of different towns, it is obvious that very few indeed can possess a knowledge of the facts necessary to form a just opinion. We propose, so to speak, simply to supply, in this important matter, competent advice and authoritative guidance.

To some it may appear that this system of affiliation would bear heavily on some of the provincial schools, by demanding conditions that they might have difficulty in fulfilling.

How are we to meet this difficulty? By calling upon the public to give the same material aid by endowment and otherwise to the schools for students in medicine that they have long done to the schools for students in arts and divinity. In a large town, a local medical school may be considered as absolutely essential for the efficient working of the hospitals, and as securing to the young medical student of limited means advantages of which he would otherwise be deprived.

These are public services; and we are sure that all right-minded men will acknowledge that the burden of maintaining high-class medical education which *is not self-supporting* should be in part borne by the public who profit by it, and not wholly thrown upon a few zealous medical men, who as now give vast time and labour in teaching for most inadequate remuneration. If this duty were accepted by the public, there would soon be no difficulty on the part of any provincial school in complying with even the most stringent conditions of recognition.*

* Some pertinent observations on this head will be found in an admirable paper on Medical Education, by Dr. Hughes Bennett.—*Lancet*, May 12th, 1866.

* In the University of Oxford, the whole question of University extension is now under consideration; and I have great pleasure in referring those interested in the subject of our observations to the valuable "Report of the Subcommittee on Extension by Affiliation", and to the letter of Dr. Daubeny, addressed to Professor Goldwin Smith, the Chairman of the Subcommittee.

HEARTS OF INSECTS AND MOLLUSCA. M. Alexandre Brandt has endeavoured to demonstrate that the motions of the heart in insects and certain mollusca are not determined in any way by the extrinsic muscles. The pulsations continue with the same intensity during a certain time after that organ has been completely isolated.